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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,143	09/30/2003	Young-Woo Lee	1293.1829	3823
21171 7590 02/06/2009 STAAS & HALSEY LLP SUITE 700			EXAMINER	
			AGUSTIN, PETER VINCENT	
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The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/673,143	LEE ET AL.
Office Action Summary	Examiner	Art Unit
	Peter Vincent Agustin	2627
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING IT  Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory perioder in the provision of Failure to reply within the set or extended period for reply will, by statue Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be ti d will apply and will expire SIX (6) MONTHS fron tte, cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 17 and 2a) This action is <b>FINAL</b> . 2b) The 3) Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4)  Claim(s) 1-44 is/are pending in the applicatio 4a) Of the above claim(s) 9-14,22-26 and 34- 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-8,15-21,27-33 and 39-44 is/are regarded to. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/	38 is/are withdrawn from consider jected.	ation.
Application Papers		
<ul> <li>9) The specification is objected to by the Examir</li> <li>10) The drawing(s) filed on is/are: a) ac</li> <li>Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre</li> <li>11) The oath or declaration is objected to by the E</li> </ul>	ccepted or b) objected to by the e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Bures * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:	oate

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#### **DETAILED ACTION**

1. After careful consideration of applicant's arguments presented in the Pre-Appeal Brief Request for Review filed on November 17, 2008, prosecution is hereby reopened.

2. Claims 1-44 are currently pending, with claims 9-14, 22-26 & 34-38 withdrawn from consideration, and claims 1-8, 15-21, 27-33 & 39-44 being examined.

## Claim Objections

3. Claims 6-8 & 19-21 are objected to because they are exact duplicates of each other.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-5, 15-18 & 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogihara (US 2002/0075780).

In regard to claim 1, Ogihara discloses a recording medium type discriminating apparatus (Figure 1), comprising: a radio frequency (RF) amplifier (109) to output a signal ( $S_{PP}$ ) based on light reflected from a recording medium (101); a wobble amplitude detector (118) to detect an amplitude (LV2 in Figure 3) of a wobble formed on the recording medium based on an output signal of the RF amplifier (see Figure 3); and a system controller (105) to discriminate a recording medium type of the recording medium (101) by comparing the wobble amplitude (LV2) with a pre-set wobble amplitude reference value (paragraph 0036: "predetermined level").

In regard to claim 2, Ogihara discloses that the RF amplifier (109) detects a push-pull signal ( $S_{PP}$ ) by determining an amount of the reflected light and provides the detected push-pull signal to the wobble amplitude detector (118).

In regard to claims 3 & 4, Ogihara discloses that the wobble amplitude detector detects a peak-to-peak value of the output signal of the RF amplifier and identifies the detected peak-to-peak value as the wobble amplitude (see paragraph 0037: "mVp-p").

In regard to claim 5, Ogihara discloses that the system controller (105) determines that the recording medium is a DVD(+) type recording medium when the wobble amplitude is higher than the reference value and that the recording medium is a DVD(-) type recording medium when the wobble amplitude is not higher than the reference value (note the description of LV2, as compared to the predetermined level, in paragraph 0036).

Claims 15-18 & 27-30 have similar limitations as claims 1-5 and are rejected on the same grounds.

#### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 6-8, 19-21, 31-33 & 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogihara.

In regard to claims 6-8 & 19-21, Ogihara discloses a recording medium type discriminating apparatus (Figure 1), comprising: a radio frequency (RF) amplifier (109) to output

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a signal (S<sub>PP</sub>) based on light reflected from a recording medium (101); a wobble amplitude detector (118) to detect an amplitude of a wobble formed on the recording medium based on an output signal of the RF amplifier (see Figure 3); and a system controller (105) to discriminate a recording medium type of the recording medium (101) by comparing the wobble amplitude with a reference value (see paragraph 0036).

Ogihara does not explicitly disclose: in regard to claims 6 & 19, that the reference value is about 16 nm; in regard to claims 7 & 20, that the reference value is less than 18 nm; and in regard to claims 8 & 21, that the reference value is greater than 14 nm.

However, as noted above, Ogihara discloses the general conditions of claims 6-8 & 19-21. Therefore, selecting a reference value of "about 16 nm", "less than 18 nm", or "greater than 14 nm" would have been, to a person of ordinary skill in the art, an obvious matter of optimization of values/ranges discoverable through routine experimentation, and such optimization is not considered inventive, absent any evidence indicating that such values/ranges are critical. See MPEP § 2144.05, *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382; *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). For more recent cases applying this principle, see *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

Claims 31-33 & 39-44 have similar limitations as claims 6-8 and are rejected on the same grounds.

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# Response to Arguments

8. Applicant's arguments filed on November 17, 2008 have been fully considered but are moot in view of the new ground(s) of rejection.

9. New rejection of claims 1-5 & 15-30 under 35 U.S.C. § 102(b) based on Ogihara (US 2002/0075780).

The claims were previously rejected based on combinations of the Ogihara reference and various secondary references. After careful consideration of the claims, it is noted that these secondary references were not necessary, and that the Ogihara reference nevertheless teaches all the limitations of claims 1-5 & 15-30.

In the amendment filed on December 7, 2007, claim 1 was amended to indicate that the type of recording medium is discriminated by comparing the wobble amplitude with a pre-set wobble amplitude reference value, and the applicant argued (see page 10, last four paragraphs) that any calculated amplitudes in Ogihara are not compared against a "reference value", but are actually compared against each other. Applicant appears to be referring to the description in paragraph 0036 of Ogihara, which in fact teaches comparing detection levels LV1 & LV2 with each other. However, as noted in paragraph 0036, disk identification is not based only on this comparison of LV1 & LV2. This comparison merely checks whether the condition LV1>LV2 is established. After a relationship of LV1>LV2 is established, each of LV1 and LV2 is compared to a predetermined level, and based on this comparison to the predetermined level, the disk is discriminated to be one of a DVD-RW and a DVD+RW. As clarified by the examiner in the 102 rejection above, this "predetermined level" described in paragraph 0036 of Ogihara is read to

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correspond to the claimed "pre-set wobble amplitude reference value", to which a wobble amplitude, e.g., LV2, is compared.

10. New rejection of claims 6-8, 19-21, 31-33 & 39-44 under 35 U.S.C. § 103(a) based on Ogihara (US 2002/0075780).

Similarly, these claims were previously rejected based on combinations of the Ogihara reference and various secondary references. The examiner has eliminated the secondary references from the 103(a) rejection. It should be noted, however, that these claims remain rejected under 35 U.S.C. § 103(a) based on the Ogihara reference, for the reasons noted in the rejection above.

### **Contact Information**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Peter Vincent Agustin/ Primary Examiner, Art Unit 2627 /Andrea L Wellington/ Supervisory Patent Examiner, Art Unit 2627